What is claimed is:

1. An organic electroluminescence element comprising an anode, semiconductor layer, organic light-emitting medium, and a cathode, characterized in that an organic light-emitting medium is located between the first electrode and the semiconductor layer comprising the non-monocrystal material and the second electrode is electrically connected to the edge section of the semiconductor layer when either one of the anode or cathode is designated to the first electrode and the other electrode to the second electrode.

2. The organic electroluminescence element according to claim 1 wherein the second electrode is electrically connected to the extended section extended in the horizontal direction from the edge section of the semiconductor layer.

3. The organic electroluminescence element according to claim 1 wherein the second electrodes electrically connected to two or more edge sections of the semiconductor layer.

4. The organic electroluminescence element according to claim 1 wherein the second electrode are made in patterns of lattices or combs.

5. The organic electroluminescence element according to claim 1 wherein the non-monocrystal material is at least one of the charcogenide materials selected from a group

consisting of ZnS, ZnSe, CdS, CdTe, ZnTe, MgS, MgSe, ZnSSe, ZnMgSSe, ZnCdSSe, and ZnTeSe.

6. The organic electroluminescence element according to claim 1 wherein the non-monocrystal material is at least one of the metal oxide non-degenerate semiconductors selected from a group consisting of oxidized Al, Sn, Zn, In, Cd, Mg, and Si.

7. The organic electroluminescence element according to claim 1 wherein the non-monocrystal material is either amorphous carbon or diamond-like carbon.

8. The organic electroluminescence element according to claim 1 wherein the non-monocrystal material is conductive conjugate polymer, oxidizing agent added polymer, reducing agent added polymer, oxidizing agent added low-molecular weight compound, or reducing agent added low-molecular weight compound.

9. The organic electroluminescence element according to claim 1 wherein the band gap of the semiconductor layer is held to 2.7 eV or higher.

10. The organic electroluminescence element according to claim 1 wherein the thickness of the semiconductor layer is held within 1 to 700 nm.

11. The organic electroluminescence element according to claim 1 wherein the specific resistance of the

semiconductor layer is held within the range of 1×10^{-3} to $1 \times 10^{4}\ \Omega \cdot cm$.

12. The organic electroluminescence element according to claim 1 wherein the electric charge concentration of the semiconductor layer is held within the range of 1×10^{12} to $1 \times 10^{20}\ cm^{-3}$.

13. The organic electroluminescence element according to claim 1 wherein the light transmittance of the semiconductor layer is held to 10% or more.

14. The organic electroluminescence element according to claim 1 wherein an electric insulation section is located between the second electrode and the organic light-emitting medium.

15. The organic electroluminescence element according to claim 1 wherein the conductive layer is interposed between the second electrode and the semiconductor layer.

16. The organic electroluminescence element according to claim 1 wherein it is configured in such a manner that the EL light emitting is taken out from the semiconductor layer to the outside.

17. The organic electroluminescence element according to claim 1 wherein an auxiliary electrode is provided for the second electrode.

18. A manufacturing method of the organic electroluminescence element including the anode, semiconductor layer, organic light-emitting medium, and the cathode, comprising

a step for forming the second electrode,

a step for forming a semiconductor layer at the position where the second electrode is able to be electrically connected to the edge section of the semiconductor layer using the non-monocrystal material,

a step for forming the organic light-emitting medium,

a step for forming the first electrode,

when either of the anode or cathode is called the first electrode and the other electrode the second electrode.

19. The process for manufacturing the organic electroluminescence element according to claim 18, wherein the step for patterning is included in the step for forming the second electrode.

20. The process for manufacturing the organic electroluminescence element according to claim 18, wherein a step for forming the electric insulation film is included for covering the second electrode, or for forming the non-injection type semiconductor layer or metal layer.